

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table 1. Facility Information

WDID	
Discharger	Newhall Ranch Sanitation District
Name of Facility	Newhall Ranch Water Reclamation Plant
Facility Address	Hwy 126 at Los Angeles/Ventura County Line
	Newhall, California, 91355
	Los Angeles County
Facility Contact, Title and Phone	Steve Sheridan, Principal Engineer (626) 458-7151
Authorized Person to Sign and Submit Reports	Steve Sheridan, Principal Engineer (626) 458-7151
Mailing Address	900 South Fremont, Alhambra, CA 91803
Billing Address	900 South Fremont, Alhambra, CA 91803
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	N
Reclamation Requirements	Future producer, applied for new water recycling requirements under separate Order
Facility Permitted Flow	2 million gallons per day (MGD)
Facility Design Flow	2 MGD
Watershed	Santa Clara River
Receiving Water	Santa Clara River
Receiving Water Type	Inland surface water

A. Ownership.

Newhall Land and Farming Company (Newhall Land) is planning on transferring ownership of the land to Newhall Ranch Sanitation District (Newhall Ranch SD) in

September 2007. Newhall Ranch SD will make a formal application to the existing twenty-four County Sanitation Districts to become signatory to the amended Joint Administration Agreement (JAA), dated July 1, 1980, of the County Sanitation Districts of Los Angeles County. Newhall Ranch SD will also make a formal application to the Santa Clarita Valley Sanitation District to enter into an agreement regarding the ownership and operation of the Newhall Ranch WRP. These agreements will allow the Los Angeles County Sanitation District to be the operator of the Newhall Ranch WRP, and to provide engineering and administrative staff at the Newhall Ranch WRP. However, the Los Angeles County Department of Public Works is staff for the Newhall Ranch SD until such time as Newhall Ranch SD joins the JAA. Newhall Ranch SD will retain ownership of the Newhall Ranch WRP.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. Proposed Discharge.

The Discharger proposes to discharge tertiary-treated wastewater to the Santa Clara River, a water of the United States. The Newhall Ranch Water Reclamation Plant will be a new discharger and is currently not regulated by any other Order. Although Newhall Land has obtained coverage under the General Order No. R4-2003-0111, National Pollutant Discharge Elimination System (NPDES) permit No. CAG994004, to discharge groundwater associated with dewatering and construction activities. Discharge of tertiary-treated effluent, as proposed in the Report of Waste Discharge (ROWD), should commence several months after the effective date of this NPDES Order.

C. ROWD.

The Discharger filed a report of waste discharge and submitted an application for new Waste Discharge Requirements (WDRs) and NPDES permit on April 23, 2004, years in advance of the anticipated discharge date and prior to the formation of the new Newhall Ranch Sanitation District. Supplemental information, including the analytical results of receiving water sampling, was submitted between September 27, 2004 and March 30, 2007. The required signatory requirements for the ROWD were received on May 4, 2007 and May 23, 2007. A site visit was conducted on May 23, 2007, to observe the site where the new POTW would be constructed.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

Treatment at the Newhall Ranch WRP, a publicly owned treatment works (POTW), will consist of screening, activated sludge secondary treatment with membrane bioreactors, nitrification/denitrification, ultraviolet disinfection, and partial reverse osmosis. There will be no solids handling facilities in the near term. Waste activated sludge will be hauled away to the Valencia Water Reclamation Plant for further treatment and disposal. Treated wastewater will be discharged from Discharge Point 001 (see Table on Cover

Page) to the Santa Clara River, a water of the United States, tributary to the Santa Clara River Estuary, within the Santa Clara River Watershed.

B. Discharge Points and Receiving Waters

The Newhall Ranch WRP will discharge tertiary-treated wastewater to an unlined section of the Santa Clara River, a water of the United States, through Discharge Serial No. 001 (Latitude 34° 0.403166'N, Longitude 118° 0.6896667'W), within the Santa Clara River Watershed. The Newhall Ranch WRP will be located downstream of the Los Angeles County Sanitation District's Saugus and Valencia WRPs. It will have an initial design capacity of 2 MGD, and incrementally increase its design capacity to 6.8 MGD [2.0 MGD in Phase I; 4.0 MGD in Phase II; and 6.8 MGD in Phase III], to accommodate the sewage generated by new inhabitants, as additional tracts of the Landmark Village development project are completed.

The Santa Clara River is one of the largest river systems in southern California. The River originates in the northern slope of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, and flows into the Pacific Ocean, halfway between the cities of San Buenaventura and Oxnard.

Extensive patches of riparian habitat are present along the length of the River and its tributaries. The endangered fish, the unarmored stickleback, is resident in the river. One of the largest of the Santa Clara River's tributaries, Sespe Creek, is designated as a wild trout stream by the state of California and supports significant spawning and rearing habitat. The Sespe Creek is also designated a wild and scenic river. Piru and Santa Paula Creeks, which are tributaries to the Santa Clara River, support habitat for steelhead. In addition, the river serves as an important wildlife corridor. A lagoon exists at the mouth of the river and supports a large variety of wildlife.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

Not applicable. Newhall Ranch WRP does not have any existing requirements.

Table 2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (From <Date> – To <Date>)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge

D. Compliance Summary

Not applicable. Newhall Ranch WRP does not have any existing requirements.

E. Planned Changes

The Newhall Ranch WRP would have an initial design capacity of 2 MGD, and incrementally increase its design capacity to 6.8 MGD [2.0 MGD in Phase I; 4.0 MGD in Phase II; and 6.8 MGD in Phase III], to accommodate the sewage generated by new inhabitants, as additional tracts of the Landmark Village development project are completed.

- In January 2008 grading activities are scheduled to begin.
- In June 2008 Newhall Ranch SD is scheduled to approve the plans for the plant design.
- In September 2008, construction of the Newhall Ranch WRP is scheduled to begin.
- By August 2009, the Newhall Ranch WRP (2 MGD capacity) should be constructed. Pending the outcome of TMDL-based studies being conducted in the Santa Clara River Watershed, the plant may be modified in the future to provide reverse osmosis treatment to a portion of the treated effluent, in an effort to reduce the chloride concentrations discharged.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

The discharger is a new source, as defined in the CWA, and has prepared an Environmental Impact Report (EIR). The Regional Water Board has considered the EIR and these waste discharge requirements will mitigate or avoid the significant impacts on water quality by recycling the majority of the treated effluent and/or by partially treating the effluent with reverse osmosis. The California Environmental Quality Act (CEQA) requirements have been met in accordance with Section 13389 of the CWC.

C. State and Federal Regulations, Policies, and Plans

- 1. Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (hereinafter Basin Plan) on June 13, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Water Resources Control Board

(State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic water supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to the Santa Clara River are as follows:

Table 3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Santa Clara River (Hydro Unit 403.51)	<u>Existing:</u> Industrial Service Supply (IND); Industrial Process Supply (PROC); Agricultural Supply (AGR); Ground Water Recharge (GWR); Freshwater Replenishment (FRSH); Water Contact Recreation (REC-1); Non-contact Water Recreation (REC-2); Warm Freshwater Habitat (WARM); Wildlife Habitat (WILD); preservation or rare, threatened or endangered species (RARE); and, Wetland Habitat (WET). <u>Potential*:</u> Municipal and domestic water supply (MUN).
	Santa Clara River (Hydro Unit 403.41)	<u>Existing:</u> IND; PROC; AGR; GWR; FRSH; REC-1; REC-2; WARM; WILD; RARE; Migration of Aquatic Organisms (MIGR) and, WET. <u>Potential*:</u> MUN
	Santa Clara River (Hydro Unit 403.31)	<u>Existing:</u> IND; PROC; AGR; GWR; FRSH; REC-1; REC-2; WARM; WILD; RARE; MIGR and, WET. <u>Potential*:</u> MUN
	Santa Clara River (Hydro Unit 403.21)	<u>Existing:</u> IND; PROC; AGR; GWR; FRSH; REC-1; REC-2; WARM; WILD; RARE; MIGR and, WET. <u>Potential*:</u> MUN.
	Santa Clara River (Hydro Unit 403.11)	<u>Existing:</u> IND; PROC; AGR; GWR; FRSH; REC-1; REC-2; WARM; Cold Water Habitat (COLD); WILD; RARE; MIGR and, WET. <u>Potential*:</u> MUN.
	Santa Clara River Estuary (Hydro Unit 403.11)	<u>Existing:</u> Navigation (NAV); REC-1; REC-2; Commercial and Sport Fishing (COMM); Estuarine Habitat (EST); Marine Habitat (MAR); WILD; RARE; MIGR; Spawning, Reproduction, and/or Early Development (SPWN); and, WET. <u>Potential*:</u> MUN.

Requirements of this Order implement the Basin Plan and subsequent amendments.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
4. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
5. **Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
6. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations¹ section 122.44(l)

¹ All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. Since this is a new discharge, all effluent limitations and requirements contained in this Order are new. Therefore, there is no relaxation of effluent limitations. The WDR is consistent with the anti-backsliding requirements of the CWA and federal regulations.

D. Impaired Water Bodies on CWA 303(d) List

On November 30, 2006, USEPA approved the State's 2004-2006 303(d) list of impaired waterbodies. The list (hereinafter referred to as the 303(d) list) was prepared in accordance with section 303(d) of the Federal Clean Water Act to identify specific impaired waterbodies where water quality standards are not expected to be met after the implementation of technology-based effluent limitations on point sources.

Santa Clara River, Santa Clara River Estuary, and their tributaries are on the 2006 303(d) List. The following pollutants/stressors, from point and non-point sources, were identified as impacting the receiving waters:

1. Santa Clara River Estuary: Chem A, and Coliform Bacteria;
2. Santa Clara River Reach 1 (Estuary to Hwy 101 Bridge): Toxicity;
3. Santa Clara River Reach 3 (Freeman Diversion to A Street): Total Dissolved Solids;
4. Santa Clara River Reach 5 [formerly Reach 7 in 2002 303d list] (Blue Cut to West Pier Hwy 99 Bridge): Coliform Bacteria;
5. Santa Clara River Reach 6 [formerly Reach 8 in 2002 303d list] (W. Pier Hwy 99 to Bouquet Canyon Rd. Bridge) -- Hydrologic Unit 403.51: Chlorpyrifos, Coliform Bacteria, Diazinon, and Toxicity; and,
6. Santa Clara River Reach 7 [formerly Reach 9 in 2002 303d list] (Bouquet Canyon Rd to above Lang Gaging) -- Hydrologic Unit 403.51: Coliform Bacteria.

E. Other Plans, Policies and Regulations

1. **Sources of Drinking Water Policy.** On May 19, 1988, the State Water Board adopted Resolution No. 88-63, *Sources of Drinking Water (SODW) Policy*, which established a policy that all surface and ground waters, with limited exemptions, are suitable or potentially suitable for municipal and domestic supply. To be consistent with State Water Board's SODW policy, on March 27, 1989, the Regional Water Board adopted Resolution No. 89-03, *Incorporation of Sources of Drinking Water Policy into the Water Quality Control Plans (Basin Plans) – Santa Clara River Basin (4A)/ Los Angeles River Basin (4B)*.

Consistent with Regional Water Board Resolution No. 89-03 and State Water Board Resolution No. 88-63, in 1994 the Regional Water Board conditionally designated all inland surface waters in Table 2-1 of the 1994 Basin Plan as existing, intermittent, or potential for Municipal and Domestic Supply (MUN). However, the conditional designation in the 1994 Basin Plan included the following implementation provision: "no new effluent limitations will be placed in Waste Discharge Requirements as a result of these [potential MUN designations made pursuant to the SODW policy and the Regional Water Board's enabling resolution] until the Regional Water Board adopts [a special Basin Plan Amendment that incorporates a detailed review of the waters in the Region that should be exempted from the potential MUN designations arising from SODW policy and the Regional Water Board's enabling resolution]." On February 15, 2002, the USEPA clarified its partial approval (May 26, 2000) of the 1994 Basin Plan amendments and acknowledged that the conditional designations do not currently have a legal effect, do not reflect new water quality standards subject to USEPA review, and do not support new effluent limitations based on the conditional designations stemming from the SODW Policy until a subsequent review by the Regional Water Board finalizes the designations for these waters. This permit is designed to be consistent with the existing Basin Plan.

2. **Secondary Treatment Regulations.** Section 133 of 40 CFR establishes the minimum levels of effluent quality to be achieved by secondary treatment. These limitations, established by USEPA, are incorporated into this Order, except where more stringent limitations are required by other applicable plans, policies, or regulations.
3. **Storm Water.** CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR, Section 122.26 that established requirements for storm water discharges under an NPDES program. To facilitate compliance with federal regulations, on November 1991, the State Water Board issued a statewide general permit, *General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities*. This permit was amended in September 1992 and reissued on April 17, 1997 in State Water Board Order No. 97-03-DWQ to regulate storm water discharges associated with industrial activity.

General NPDES permit No. CAS000001 is applicable to storm water discharges from the Newhall Ranch WRP's premises. Newhall Ranch SD will file a Notice of Intent to comply with the requirements of the general permit. Newhall Ranch SD will develop and implement a Storm Water Pollution Prevention Plan (SWPPP), to comply with the State Water Board's (Order No. 97-03-DWQ). Newhall Ranch SD will capture and treat a percentage of the first flush runoff that falls on the Newhall Ranch WRP.

4. **Sanitary Sewer Overflows.** The Clean Water Act prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 U.S.C. §§1311, 1342). The State Water Board adopted Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems, Water Quality Order No. 2006-0003 on May 2, 2006, to

provide a consistent, statewide regulatory framework to address Sanitary Sewer Overflows (SSOs). The WDR requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all SSOs to the State Water Board's online SSO database.

The requirements contained in this Order in Sections VI.C.3.b, VI.C.4, and VI.C.6 are intended to be consistent with the requirements in the SSO WDR. The Regional Water Board recognizes that there are areas of overlapping interest between the NPDES permit conditions and the SSO WDR requirements. The requirements of the SSO WDR are considered the minimum thresholds (see Finding 11 of WQ Order NO. 2006-0003). The Regional Water Board will accept the documentation prepared by the Permittee under the SSO WDR for compliance purposes, as satisfying the requirements in Sections .C.3.b, VI.C.4, and VI.C.6, provided for any more specific or stringent provisions enumerated in this Order, have also been addressed.

5. **Watershed Management** - This Regional Water Board has been implementing a Watershed Management Approach (WMA), to address water quality protection in the Los Angeles Region, as detailed in the Watershed Management Initiative (WMI). The WMI is designed to integrate various surface and ground water regulatory programs while promoting cooperative, collaborative efforts within a watershed. It is also designed to focus limited resources on key issues and use sound science. Information about the Santa Clara River Watershed and other watersheds in the region can be obtained from the Regional Water Board's web site at <http://www.swrcb.ca.gov/rwqcb4/> and clicking on the word "Watersheds".
6. **Relevant Total Maximum Daily Loads** - A Total Maximum Daily Load (TMDL) is a determination of the amount of a pollutant, from point, non-point, and natural background sources, including a margin of safety that may be discharged to a water quality-limited water body. Section 303(d) of the CWA established the TMDL process. The statutory requirements are codified at 40 CFR, Part 130.7. TMDLs must be developed for the pollutants of concern, which impact the water quality of water bodies on the 303(d) list. The Regional Water Board has developed a TMDL that assesses the extent and sources of the ammonia and algae (nutrient/nitrogen) problems in the Santa Clara River. According to the TMDL schedule, under the amended consent decree, *Heal the Bay, Santa Monica Bay Keeper, et al. v. Browner, et al.* (March 23, 1999), the nitrogen and chloride TMDLs for the Santa Clara River must be completed by 2004 and 2003, respectively. The coliform TMDL was scheduled for completion by 2006.

a. **Chloride TMDL.**

- i. On October 24, 2002, the Regional Water Board adopted Resolution No. 2002-018, *Amendment to the Basin Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load to Reduce Chloride Loading in the Upper Santa Clara River*. Soon after, the Regional Water Board submitted the TMDL to the State Water Board for approval. On February 19, 2003, the State Water Board adopted Resolution No. 2003-0014, the "Remand Resolution," finding that the Regional Water Board staff prepared the documents and followed procedures satisfying environmental documentation

requirements in accordance with the California Environmental Quality Act, scientific peer review, and other State laws and regulations to develop a TMDL. However, the Remand Resolution directed the Regional Water Board to consider revising the implementation provisions of the chloride TMDL. On July 10, 2003, the Regional Water Board reconsidered Resolution No. 2002-018, in light of the Remand Resolution, and adopted Resolution No. 2003-008 which modified the chloride TMDL implementation provisions by:

- (1) Expanding the phased-TMDL approach to allow CSDLAC to complete the implementation tasks sequentially and within 13 years;
- (2) Extending the interim limits beyond the proposed two and a half years but not to exceed 13 years, so that the interim limits may remain in effect during the planning, construction, and execution portions of the TMDL's implementation tasks; and,
- (3) Modifying the TMDL analysis task list to include an assessment/evaluation of alternative water supplies for agricultural beneficial uses.

On May 6, 2004, the Regional Water Board adopted Resolution No. 2004-004, amending the Upper Santa Clara River Chloride TMDL. State Water Board, OAL, and USEPA approval occurred on July 22, 2004, November 15, 2004, and April 28, 2005, respectively. The Chloride TMDL became effective on May 4, 2005.

On August 3, 2006, the Regional Water Board adopted Resolution No. R4-2006-016, Amendment to the Water Quality Control Plan for the Los Angeles Region through revision of the Implementation Plan for the Upper Santa Clara River Chloride TMDL, which shortened the compliance schedule from thirteen to eleven years. State Water Board approved the resolution on May 22, 2007. OAL, and USEPA approval is pending.

- ii. On March 26, 2007, TMDL staff wrote a technical memo regarding the waste load allocation for chloride for Newhall Ranch WRP. The memo included the following background information and conclusions

(1) Background.

- a. The Newhall Ranch WRP, currently in the planning stages, is part of the Newhall Ranch Specific Plan which guides the long-term development of the 11963-acre Newhall Ranch Community. Based on information provided by the Newhall Ranch Company on November 22, 2006, the Newhall Ranch WRP treatment capacity will be 6.8 MGD of municipal and commercial wastewater that will be generated by the prospective Newhall Ranch community. The treated wastewater will be reclaimed for landscape irrigation during dry weather conditions. During wet weather, when irrigation demands are lower, unused reclaimed water will be discharged to Reach 5 of the Santa Clara River. A new sanitation district will be formed to maintain and operate the Newhall Ranch WRP.
- b. The existing water quality objective (WQO) for chloride in Reaches 5 and 6 of the Santa Clara River is 100 milligrams per liter (mg/L). The most

sensitive beneficial uses for chloride is agricultural supply (AGR). Because chloride levels in the Upper Santa Clara River (USCR) exceeded the water quality objective WQO, the USCR was listed on the 1998 303(d) list and a total maximum daily load (TMDL) for chloride in the USCR was adopted by the Regional Water Board. The USCR Chloride TMDL became effective on May 4, 2005, and the chloride wasteload allocation for existing major Publicly-Owned Treatment Works (POTWs) discharging to the USCR is also 100 mg/L. The TMDL found that the nonpoint sources of chloride were not significant relative to the point sources and that concentration based wasteload allocations were effective in protecting beneficial uses. The TMDL identified wastewater discharges from the Los Angeles County Sanitation Districts (Districts) Saugus and Valencia Water Reclamation Plants (WRPs) as the primary source of chloride and assigns waste load allocations (WLAs) of 100 mg/L chloride to the Districts WRPs. Other NPDES discharges contribute a minor chloride load and the chloride WLAs for these point sources is 100 mg/L.

- c. The USCR chloride WLAs are expressed on a concentration basis derived from and equivalent to the existing WQO, thereby providing direct protection of the most sensitive beneficial use, , agricultural supply (AGR). Under the TMDL Implementation Plan, a special study was conducted to confirm that the concentration-based WLA of 100 mg/L chloride is protective of AGR. That study has been completed and confirms that the concentration-based WLA of 100 mg/L is protective of salt sensitive AGR. A concentration-based WLA also accommodates future growth and provides beneficial uses protection from chloride loads that were in place at the time of the TMDL development. Protection of beneficial uses from additional chloride loads that were not assigned wasteload allocations is provided by using the WLAs as effluent limits in permits for new and future sources such as Newhall Ranch WRP.
- d. The Staff Report for the TMDL, dated August 21, 2002, states "A concentration-based target accommodates future growth by allowing increased mass as long as it is accompanied by additional flow. This analysis is based on existing discharge locations in the Upper Santa Clara River. Regional Water Board staff understands that an additional water reclamation plant is planned to accommodate future growth in the Santa Clarita Valley and that this plant will discharge only during rain events. Permitting of additional discharges may compromise the success of the TMDL without additional studies." Although the Staff Report implies that permitting of additional discharges may require additional studies, it is a general statement that does not define the types of studies needed. Staff finds that additional studies are not needed in order to conclude that water quality will not be degraded if concentration-based wasteload allocations that are equivalent to the WQO are assigned to new facilities. If the WLAs and effluent limits for new facilities in the Upper Santa Clara River watershed are set at the end-of

pipe and are equivalent to the TMDL WLA and WQO staff finds that these WLAs will not cause degradation of water quality. Studies regarding the effect of additional chloride load on groundwater basins underlying the USCR River are underway and scheduled for completion by November 2007. Initial results from these studies show that discharges at effluent limits of 100 mg/L chloride will not degrade groundwater quality. Staff finds that results from these studies may be used to revise the effluent limits for all dischargers discharging at 100 mg/L if necessary. If this occurs, the NPDES permit for Newhall Ranch WRP will be reopened.

- e. The majority of effluent from the Newhall Ranch WRP will be used for reclaimed water purposes. Discharge to the Santa Clara River (SCR) will primarily occur during periods when the effluent supply exceeds the reclaimed demand, such as during the peak wet months of the November through March. During years 1 and 2 of the WRP operation, the WRP will operate at a maximum of 2 mgd, with an estimated average discharge flow rate of 0.2 mgd during the 5 month wet period. No sooner than year 3 will the WRP be expanded to 6.8 mgd, with an approximate average discharge flowrate of 0.6 mgd during this 5 month wet period. Therefore, discharge periods will coincide with peak wet months when dilution capacity is maximal (i.e., instream flows are highest). The average November-March instream flowrate at USGS station 11109000 (Newhall Bridge, approximately 2.5 miles downstream of the County line) is 188 cfs (121 mgd) based on measured average daily flow data for water years 1977-2006. Newhall WRP effluent will represent less than 1% of this average volume. Consequently, TMDL staff finds that the proposed discharge will not add appreciable chloride loads to the surface water or underlying groundwater.

(2) Conclusion.

The Upper Santa Clara River Chloride TMDL WLAs for discharges from the Saugus and Valencia WRPs into Rech 5 and 6 of the Santa Clara River are concentration-based which protects sensitive AGR uses in the River while accommodating future growth. The TMDL does not prohibit future growth or increased loads. Use of concentration-based WLAs requires that increased chloride loads are concurrent with increased discharge flow to the USCR. The increased flow increases the capacity of the receiving water to assimilate chloride. Because the Newhall Ranch WRP will increase flow in the WRP, the discharge of the NRWRP would not contribute to further impairment of surface water in Reaches 5 and 6 of the Santa Clara River if the chloride concentration in discharge is equal to or less than the WQO and TMDL WLA of 100 mg/L. An NPDES discharge permit with an effluent limit of 100 mg/L chloride would be consistent with the TMDL. Additional studies are not needed at this time if the effluent limit for chloride is concentration-based and set at, or is less than the WQO the of 100 mg/L.

- b. **Nitrogen Compounds TMDL.** On August 7, 2003, the Regional Water Board adopted Resolution No. 2003-11, the *Santa Clara River Nitrogen Compounds TMDL (Nitrogen Compounds TMDL)*. State Water Board, OAL, and USEPA approval occurred on November 19, 2003, February 27, 2004, and March 18, 2004, respectively. The Nitrogen Compounds TMDL became effective on March 23, 2004. Although the Nitrogen Compounds TMDL does not specify an individual WLA for the Newhall Ranch WRP, the Nitrogen Compounds TMDL staff report does discuss future growth. The staff report states that "the numeric targets for POTWs with increasing capacity or new POTWs will be set on a concentration basis...."

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

Effluent and receiving water limitations in this Board Order are based on the Federal Clean Water Act, Basin Plan, State Water Board 's plans and policies, USEPA guidance and regulations, and best practicable waste treatment technology. This order authorizes the discharge of tertiary-treated wastewater through Discharge Serial No. 001 only. It does not authorize any other types of discharges.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Technology-based effluent limits require a minimum level of treatment for industrial/municipal point sources based on currently available treatment technologies while allowing the discharger to use any available control techniques to meet the effluent limits. The 1972 CWA required POTWs to meet performance requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level--referred to as "secondary treatment"--that all POTWs were required to meet by July 1, 1977. More specifically, Section 301(b)(1)(B) of the CWA required that EPA develop secondary treatment standards for POTWs as defined in Section 304(d)(1). Based on this statutory requirement, EPA developed national secondary treatment regulations which are specified in 40 CFR 133. These technology- based regulations apply to all POTWs and identify the minimum level of effluent quality to be attained by secondary treatment in terms of five-day biochemical oxygen demand, total suspended solids, and pH.

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at Part 133 and Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3.

2. Applicable Technology-Based Effluent Limitations

This facility is subject to the technology-based regulations for the minimum level of effluent quality attainable by secondary treatment in terms of BOD₅20°C, TSS, and pH. The following Table summarizes the technology-based effluent limitations applicable to the Facility:

Summary of Technology-based Effluent Limitations Discharge Point 001

Table 4. Summary of Technology-based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
BOD ₅ 20°C	mg/L	20	30	45	--	--
	lbs/day	330	500	750	--	--
Total Suspended solids (TSS)	mg/L	15	40	45	--	--
	lbs/day	250	670	750	--	--
pH	standard units	--	--	--	6.5	8.5
Removal Efficiency for BOD and TSS	%	85	--	--	--	--

However, this facility is also subject to technology-based effluent limitations contained in similar NPDES permits, for similar facilities, based on the treatment level achievable by tertiary-treated wastewater treatment systems. These effluent limitations are consistent with the State Water Board precedential decision, State Water Board Order No. WQ 2004-0010 for the City of Woodland. Further, mass-based effluent limitations are based on a design flow rate of 2.0 MGD for Phase I, and ultimately on a 6.8 MGD flow rate for Phase III.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. This Order contains requirements, expressed as a technology equivalence requirement, more stringent than secondary treatment requirements that are necessary to meet applicable water quality standards. The rationale for these requirements, which consist of tertiary treatment or equivalent requirements or other provisions, is discussed starting from Section IV.C.2.b.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

- a. The Basin Plan establishes the beneficial uses for surface water bodies in the Los Angeles region. The beneficial uses of the Santa Clara River affected by the

discharge have been described previously in this Fact Sheet and in the WDR findings.

- b. The Basin Plan also specifies narrative and numeric water quality objectives applicable to surface water as shown in the following discussions.
 - i. Table 5 summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent or receiving water. These criteria were used in conducting the Reasonable Potential Analysis for this Order.

ii. **Biochemical Oxygen Demand (BOD) and Suspended solids**

Biochemical oxygen demand (BOD) is a measure of the quantity of the organic matter in the water and, therefore, the water's potential for becoming depleted in dissolved oxygen. As organic degradation takes place, bacteria and other decomposers use the oxygen in the water for respiration.

Unless there is a steady resupply of oxygen to the system, the water will quickly become depleted of oxygen. Adequate dissolved oxygen levels are required to support aquatic life. Depressions of dissolved oxygen can lead to anaerobic conditions resulting in odors, or, in extreme cases, in fish kills.

40 CFR, Part 133 describes the minimum level of effluent quality attainable by secondary treatment, for BOD and suspended solids, as:

- a. the monthly average shall not exceed 30 mg/L; and,
- b. the 7-day average shall not exceed 45 mg/L.

The Newhall Ranch WRP will provide tertiary treatment, as such, the limits in the permit are more stringent than secondary treatment requirements. The Plant will achieve solids removal rates that are better than secondary-treated wastewater by adding a polymer/coagulant to enhance the precipitation of solids, and by filtering the effluent.

In addition to having mass-based and concentration-based effluent limitations for BOD and suspended solids, the Newhall Ranch WRP also has a percent removal requirement for these two constituents. In accordance with 40 CFR, Sections 133.102(a)(3) and 133.102(b)(3), the 30-day average percent removal shall not be less than 85 percent. Percent removal is defined as a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

iii. pH

The hydrogen ion activity of water (pH) is measured on a logarithmic scale, ranging from 0 to 14. While the pH of "pure" water at 25°C is 7.0, the pH of natural waters is usually slightly basic due to the solubility of carbon dioxide from the atmosphere. Minor changes from natural conditions can harm aquatic life. The effluent limitation for pH which reads, "the wastes discharged shall at all times be within the range of 6.5 to 8.5," is taken from the Basin Plan (page 3-15) which reads "the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge."

iv. Settleable solids

Excessive deposition of sediments can destroy spawning habitat, blanket benthic (bottom dwelling) organisms, and abrade the gills of larval fish. The limits for settleable solids are based on the Basin Plan (page 3-16) narrative, "Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses." The numeric limits are empirically based on results obtained from the settleable solids 1-hour test, using an Imhoff cone.

It is impracticable to use a 7-day average limitation, because short term spikes of settleable solid levels that would be permissible under a 7-day average scheme would not be adequately protective of all beneficial uses.

v. Oil and Grease

Oil and grease are not readily soluble in water and form a film on the water surface. Oily films can coat birds and aquatic organisms, impacting respiration and thermal regulation, and causing death. Oil and grease can also cause nuisance conditions (odors and taste), are aesthetically unpleasant, and can restrict a wide variety of beneficial uses. The limits for oil and grease are based on the Basin Plan (page 3-11) narrative, "Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses."

The numeric limits are empirically based on concentrations at which an oily sheen becomes visible in water. It is impracticable to use a 7-day average limitation, because spikes that occur under a 7-day average scheme could

cause visible oil sheen. A 7-day average scheme would not be sufficiently protective of beneficial uses.

vi. Residual chlorine

Disinfection of wastewaters with chlorine produces chlorine residual. Chlorine and its reaction products are toxic to aquatic life. The limit for residual chlorine is based on the Basin Plan (page 3-9) narrative, "Chlorine residual shall not be present in surface water discharges at concentrations that exceed 0.1 mg/L and shall not persist in receiving waters at any concentration that causes impairment of beneficial uses."

It is impracticable to use a 7-day average or a 30-day average limitation, because it is not as protective as of beneficial uses as a daily maximum limitation is. Chlorine is very toxic to aquatic life and short-term exposures of chlorine may cause fish kills.

Although the Newhall Ranch WRP proposes to use UV light as its primary means of disinfection, similar facilities have had to use small concentrations of residual chlorine to supplement UV disinfection, in order to kill certain virus present in wastewater or for maintenance purposes to clean the UV lamps. The facility has reasonable potential for residual chlorine because it proposes to use sodium hypochlorite to clean and wash the UV lamps. In addition, all potable water has traces of residual chlorine. In addition, the facility may choose to add residual chlorine to their effluent at a later date, similar to what other POTWs with UV have done.

vii. Total Dissolved Solids, Chloride, Sulfate, and Boron

The limits for total dissolved solids, sulfate, chloride, and boron are based on Basin Plan Table 3-8 (page 3-12), for the Santa Clara River watershed (between West Pier Highway 99 and Blue Cut Gauging Station). TDS = 1000 mg/L; Sulfate = 400 mg/L; Chloride = 100 mg/L; and Boron = 1.5 mg/L. It is practicable to express these limits as monthly averages, since they are not expected to cause acute effects on beneficial uses. These limits will protect waters of the US and prevent degradation.

viii. Methylene Blue Activated Substances (MBAS)

The MBAS procedure tests for the presence of anionic surfactants (detergents) in surface and ground waters. Surfactants disturb the water surface tension, which affects insects and can affect gills in aquatic life. The MBAS can also impart an unpleasant soapy taste to water, as well as cause scum and foaming in waters, which impact the aesthetic quality of both surface and ground waters.

Given the nature of the facility (a POTW) which accepts domestic wastewater into the sewer system and treatment plant, and the characteristics of the wastes discharged, the discharge has reasonable potential to exceed both the numeric MBAS water quality objective (WQO) and the narrative WQO for prohibition of floating material such as foams and scums. Therefore an effluent limitation is required.

The Discharger has collected receiving water samples and has reported detectable quantities of MBAS concentrations in the Santa Clara River in the vicinity of the proposed discharge. The discharge from the Newhall Ranch may have reasonable potential to contribute to an exceedance of the 0.5 mg/L WQO. The 0.5 mg/L concentration (which has been determined to be protective of beneficial uses and the aesthetic quality of waters), is based on the Department of Health Services' secondary drinking water standard, and on the Basin Plan WQO (p.3-11) which reads, "Waters shall not have MBAS concentrations greater than 0.5 mg/L in waters designated MUN." While the wastewater from this POTW is not directly discharged into a MUN designated surface water body, it will percolate into unlined reaches of the Santa Clara River [via ground water recharge designated beneficial use (GWR)] to ground water designated for MUN beneficial use. In addition, the Basin Plan states that "Ground water shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses." Therefore, the secondary MCL should be the MBAS limit for this discharge to protect ground water recharge and the MUN use of the underlying ground water, while also protecting surface waters from exhibiting scum or foaming.

Since the Basin Plan objective is based on a secondary drinking water standard, it is practicable to have a monthly average limitation in the permit, rather than a daily maximum.

ix. Total Inorganic Nitrogen

Total inorganic nitrogen is the sum of Nitrate-nitrogen and Nitrite-nitrogen. High nitrate levels in drinking water can cause health problems in humans. Infants are particularly sensitive and can develop methemoglobinemia (blue-baby syndrome). Nitrogen is also considered a nutrient. Excessive amounts of nutrients can lead to other water quality impairments, ex. algae.

- (1) **Concentration-based Limit** - The effluent limit for total inorganic nitrogen ($\text{NO}_2\text{-N} + \text{NO}_3\text{-N}$) of 5 mg/L is based on Basin Plan Table 3-8 (page 3-12), for the Santa Clara River watershed (between West Pier Highway 99 and Blue Cut Gaging Station).

- (2) **Mass-based Limit** - The mass bases limits are based on the Phase I initial plant design flow rate of 2.0 mgd, and are calculated as follows: $\text{Flow(MDG)} \times \text{Concentration (mg/L)} \times 8.34 \text{ (conversion factor)} = \text{lbs/day}$. However, the design capacity will incrementally increase to 6.8 MGD, as the phased plant expansion approaches completion. The mass-based effluent limitation will accordingly be modified upon certification and approval of increased treatment plant capacity. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

x. **Nitrite as Nitrogen**

Chapter 3 of the Basin Plan (page 3-11) contains the following water quality objective, "Waters shall not exceed the 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen ($\text{NO}_3\text{-N} + \text{NO}_2\text{-N}$), 45 mg/L as nitrate (NO_3), 10 mg/L as nitrate-nitrogen ($\text{NO}_3\text{-N}$), or 1 mg/L as nitrite-nitrogen ($\text{NO}_2\text{-N}$) or as otherwise designated in Table 3-8."

However, the TMDL for Nitrogen Compounds in the Santa Clara River (*Nitrogen Compounds TMDL*), Resolution No. 2003-011, adopted by the Regional Water Board on August 7, 2003, contains a 0.9 mg/L concentration-based WLA for POTWs in the Santa Clara River Watershed. The 0.9 mg/L WLA is based upon the Basin Plan WQO, with a 10% margin of safety. The TMDL supercedes the generic Basin Plan WQO. Given the nature of the facility, the Discharger has reasonable potential to cause or contribute to an exceedance based on best professional judgment, and therefore needs a limit for Nitrite-N. The 0.9 mg/L limit will have to be met at the end-of-pipe, because dilution is not an option at the present time.

xi. **Ammonia Nitrogen**

Ammonia is a pollutant routinely found in the wastewater effluent of Publicly Owned Treatment Works (POTWs), in landfill-leachate, as well as in run-off from agricultural fields where commercial fertilizers and animal manure are applied. Ammonia exists in two forms – un-ionized ammonia (NH_3) and the ammonium ion (NH_4^+). They are both toxic, but the neutral, un-ionized ammonia species (NH_3) is much more toxic, because it is able to diffuse across the epithelial membranes of aquatic organisms much more readily than the charged ammonium ion. The form of ammonia is primarily a function of pH, but it is also affected by temperature and other factors. Additional impacts can also occur as the oxidation of ammonia lowers the dissolved oxygen content of the water, further stressing aquatic organisms. Oxidation of ammonia to nitrate may lead to groundwater impacts in areas of recharge. [There is groundwater recharge in these reaches]. Ammonia also combines

with chlorine (often both are present in POTW treated effluent discharges) to form chloramines – persistent toxic compounds that extend the effects of ammonia and chlorine downstream.

Ammonia was 303(d) listed in Reach 3 of the Santa Clara River, downstream of the discharge, in the 2002 303(d) list. Due to the nature of the facility, ammonia has reasonable potential to cause or contribute to an excursion of a water quality objective. Therefore, a water quality-based effluent limitation for total ammonia is required in order to be protective of the water quality objective.

The 1994 Basin Plan contained water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Water Board, with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use designations for protection of Aquatic Life*. This Resolution also modified the Basin Plan to include an implementation provision which specifies the procedure for translating the ammonia WQO into final effluent limitations. Resolution No. 2002-011 was approved by the State Water Board, the Office of Administrative Law, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively.

On August 7, 2003, the Regional Water Board adopted Resolution No. 2003-011, *Amendment to the Basin Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds in the Santa Clara River (Nitrogen Compounds TMDL)*. The TMDL does not contain an ammonia nitrogen Waste Load Allocations (WLA) for the Newhall Ranch WRP. However, the TMDL staff report contains the following statement: "The numeric targets for POTWs with increasing capacity or new POTWs will be set on a concentration basis...". The final effluent limitations for ammonia prescribed in this Order are based on the Nitrogen Compounds TMDL numeric target for TMDL-Reach 7 at the County Line, and apply at the end of pipe.

On December 1, 2005, the Regional Water Board adopted Resolution No. 2005-014, *Amendment to the Water Quality Control Plan for the Los Angeles Region Revise the Early Life Stage Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) for Protection of Aquatic Life*. Resolution No. 2005-014 was approved by the State Water Board, the Office of Administrative Law, and USEPA on July 19, 2006, August 31, 2006, and April 5, 2007, respectively. This amendment contains ammonia objectives to protect Early Life Stages (ELS) of fish in inland surface water supporting aquatic life. It revised the implementation provision included as part of the

freshwater ammonia objectives relative to the protection of ELS of fish in inland surface waters. ELS of fish has been determined to be present in the Santa Clara River, because the receiving water is not included in the list of waterbodies where ELS is absent.

The limitations for ammonia prescribed in this Order are based on the ammonia criteria as revised by Resolution 2002-011 and Resolution No. R4-2005-014. Consistent with methods used to develop ammonia waste load allocation for TMDLs in the Los Angeles region (such as the Los Angeles River Nutrient TMDL and the Malibu Creek Nutrient TMDL), the 50th percentile of receiving water pH and temperature data (7.8 pH units and 15.6°C, respectively), as measured at what would be the immediate downstream receiving water location, were used to calculate the monthly average ammonia limitation that resulted to 1.48 mg-N/L. The 90th percentile of pH data (8.4 pH units), as measured at what would be the immediate downstream receiving water location, was used to calculate the daily maximum ammonia effluent limitation that resulted to 3.87 mg-N/L.

Use of 50th percentile receiving water data to set monthly average limitations and 90th percentile data to set daily maximum limitations is protective of downstream receiving water bodies. Although there are no available ammonia effluent data points with which to determine seasonal or other long-term trends, for this newly proposed POTW, based on other POTWs with NDN systems ammonia concentrations are expected to fluctuate around the 50th percentile value over the course of a month. Use of a 50th percentile value is more representative of average conditions in the receiving water body than one or only a few grab samples taken over the course of a month. Note that half the time the limit would be expected to be overly protective. Use of a 90th percentile value to set a daily maximum limit is also protective. Ninety percent of the time the limit will be overly protective, and the limit will only be under protective ten percent of the time.

Table 3, Basin Plan Beneficial Uses of this Fact Sheet summarizes the applicable beneficial uses for the receiving water body. This Table indicates that Santa Clara River does not have a "COLD" or "MIGR" beneficial use designation.

a. One-Hour Average Objective (Maximum Daily Effluent Limit, MDEL)

The Facility discharges into a receiving waterbody that does not have a "COLD" or "MIGR" beneficial use designation. It is assumed that salmonids may be absent. The one-hour average objective is dependent upon pH and the presence of coldwater fish species, such as salmonids, but it is independent of temperature.

For freshwater, the one-hour average concentration of total ammonia as nitrogen (in mg N/L) shall not exceed the values in Table 3-1 (amended on April 25, 2002) of the Basin Plan or as described in the equation below:

$$\text{One-hour Average Concentration} = \frac{0.275}{1 + 10^{7.204 - \text{pH}}} + \frac{39.0}{1 + 10^{\text{pH} - 7.204}}$$

The 90th percentile of pH is 8.6, measured at the immediate downstream receiving water (Station R-A). Using the pH value of 8.4 in the formula above, the resulting MDEL is equal to 3.87 mg/L.

b. 30-Day Average Objective (Average Monthly Effluent Limit, AMEL)

Early life stage of fish is presumptively present and must be protected at all times of the year unless the water body is listed in Table 3-X of the Basin Plan (in Resolution No. 2005-014) or unless a site-specific study is conducted, which justifies applying the ELS absent condition or a seasonal ELS present condition. The Santa Clara River is not included in Table 3-X. Therefore, the above-mentioned receiving waters are considered "ELS Present". For freshwaters subject to the "Early Life Stage Present" condition, the thirty-day average concentration of total ammonia as nitrogen (in mg N/L) shall not exceed the values in Table 3-2 of the Basin Plan or as described in the equation below:

$$\text{30-day Average Concentration} = \left(\frac{0.0577}{1 + 10^{7.688 - \text{pH}}} + \frac{2.487}{1 + 10^{\text{pH} - 7.688}} \right) * \text{MIN}(2.85, 1.45 * 10^{0.028 * (25 - (T))})$$

Where T = temperature expressed in °C.

The 30-day average objective¹ is dependent on pH, temperature, and the presence or absence of early life stages of fish. The 50th percentile of pH and temperature at the immediate downstream receiving water is 7.8 pH and 15.6°C, respectively. Using the Discharger's monitoring data in the formula above, the resulting AMEL is equal to 1.48 mg/L.

¹ This is the current Basin Plan definition of the 30-day average objective, according to the Ammonia Basin Plan Amendment, Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use designations for protection of "Aquatic Life,"* adopted by the Los Angeles Regional Water Quality Control Board on April 25, 2002. It was amended by Resolution No. 2005-014, adopted by the Regional Board on December 1, 2005 and was approved by the USEPA on April 5, 2007. This new Resolution implements ELS Provision as described under "implementation", subparagraph 3. In this Resolution, the Discharger's receiving waterbody is designated as ELS absent.

A site specific objective (SSO), which would modify the Basin Plan's chronic ammonia WQO (or the ammonia CCC) in certain reaches of the Santa Clara River, the Los Angeles River, and the San Gabriel River, is tentatively scheduled for adoption by the Regional Water Board at the June 7, 2007 Board meeting. If adopted by the Regional Water Board, the Ammonia SSO would then be forwarded to the State Water Board, the Office of Administrative Law, and USEPA for approval. This approval process takes approximately one year to be completed. Therefore, the Ammonia SSO would not go into effect immediately. However, the ammonia chronic SSO will not impact the final effluent limits for ammonia, because it is the acute ammonia criteria that drives the more stringent ammonia final effluent limits. The dischargers may wish to embark on a SSO study that would lead to a Basin Plan amendment to modify the acute ammonia criteria. This permit contains a reopener which would allow the Regional Water Board to open up the permit and insert applicable new provisions resulting from future TMDLs or other Basin Plan Amendments, such as a new SSO.

xii. Coliform Bacteria

Total and fecal coliform bacteria are used to indicate the likelihood of pathogenic bacteria in surface waters. Given the nature of the facility, a wastewater treatment plant, pathogens are likely to be present in the effluent in cases where the disinfection process is not operating adequately. As such, the permit contains the following:

i. Effluent Limitations:

- The 7 day median number of coliform organisms at some point in the treatment process must not exceed 2.2 Most Probable Number (MPN) per 100 milliliters, and
- The number of coliform organisms must not exceed 23 MPN per 100 milliliters in more than one sample within any 30-day period.

These disinfection-based effluent limitations for coliform are for human health protection and are consistent with requirements established by the Department of Health Services. These limits for coliform must be met at the point of the treatment train immediately following disinfection, as a measure of the effectiveness of the disinfection process.

ii. Receiving Water Limitation

- Geometric Mean Limits
 - * E.coli density shall not exceed 126/100 mL.
 - * Fecal coliform density shall not exceed 200/100 mL.

- Single Sample Limits
 - * E.coli density shall not exceed 235/100 mL.
 - * Fecal coliform density shall not exceed 400/100 mL.

These receiving water limitations are based on Resolution No. 01-018, Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Bacteria Objectives for Water Bodies Designated for Water Contact Recreation, adopted by the Regional Water Board on October 25, 2001. The Resolution was approved by State Water Board, OAL, and USEPA, on July 18, 2002, September 19, 2002, and September 25, 2002, respectively.

xiii. Temperature

USEPA document, *Quality Criteria for Water 1986* [EPA 440/5-86-001, May 1, 1986], also referred to as the *Gold Book*, discusses temperature and its effects on beneficial uses, such as recreation and aquatic life.

- The Federal Water Pollution Control Administration in 1967 called temperature "a catalyst, a depressant, an activator, a restrictor, a stimulator, a controller, a killer, and one of the most important water quality characteristics to life in water." The suitability of water for total body immersion is greatly affected by temperature. Depending on the amount of activity by the swimmer, comfortable temperatures range from 20°C to 30°C (68 °F to 86 °F).
- Temperature also affects the self-purification phenomenon in water bodies and therefore the aesthetic and sanitary qualities that exist. Increased temperatures accelerate the biodegradation of organic material both in the overlying water and in bottom deposits which makes increased demands on the dissolved oxygen resources of a given system. The typical situation is exacerbated by the fact that oxygen becomes less soluble as water temperature increases. Thus, greater demands are exerted on an increasingly scarce resource which may lead to total oxygen depletion and obnoxious septic conditions. Increased temperature may increase the odor of water because of the increased volatility of odor-causing compounds. Odor problems associated with plankton may also be aggravated.
- Temperature changes in water bodies can alter the existing aquatic community. Coutant (1972) has reviewed the effects of temperature on aquatic life reproduction and development. Reproductive elements are noted as perhaps the most thermally restricted of all life phases, assuming other factors are at or near optimum levels. Natural short-term

temperature fluctuations appear to cause reduced reproduction of fish and invertebrates.

The Basin Plan lists temperature requirements for the receiving waters. Based on the requirements of the Basin Plan and a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*, a maximum effluent temperature limitation of 86 °F is included in the Order. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. The new temperature effluent limitation is reflective of new information available that indicates that the 100°F temperature which was formerly used in permits was not protective of aquatic organisms. A survey was completed for several kinds of fish and the 86°F temperature was found to be protective. It is impracticable to use a 7-day average or a 30-day average limitation for temperature, because it is not as protective as of beneficial uses as a daily maximum limitation is. A daily maximum limit is necessary to protect aquatic life and is consistent with the fishable/swimmable goals of the CWA.

xiv. Turbidity

Turbidity is an expression of the optical property that causes light to be scattered in water due to particulate matter such as clay, silt, organic matter, and microscopic organisms. Turbidity can result in a variety of water quality impairments. The effluent limitation for turbidity which reads, "For the protection of the water contact recreation beneficial use, the wastes discharged to water courses shall have received adequate treatment, so that the turbidity of the wastewater does not exceed: (a) a daily average of 0.2 Nephelometric turbidity units (NTUs) more than 5 percent of the time (72 minutes) during any 24 hour period; and (b) 0.5 NTUs at any time," is based on the Basin Plan's incorporation by reference of Title 22 and the definition of filtered wastewater. In comparison to other POTWs in this region, the turbidity limit for the Newhall Ranch WRP is more stringent than the typical turbidity requirement for other POTWs because the Newhall POTW proposes, according to their ROWD, to have microfiltration, rather than the conventional soils or bed of media filter which is typical in most other tertiary-level POTWs. The limitation, therefore reflects what the technology of choice by the Discharger is designed to achieve.

xv. Radioactivity

Radioactive substances are generally present in natural waters in extremely low concentrations. Mining or industrial activities increase the amount of radioactive substances in waters to levels that are harmful to aquatic life,

wildlife, or humans. Section 301 (f) of the CWA contains the following statement with respect to effluent limitations for radioactive substances: "Notwithstanding any other provisions of this Act it shall be unlawful to discharge any radiological, chemical, or biological warfare agent, any high-level radioactive waste, or any medical waste, into the navigable waters." Chapter 5.5 of the Water Code contains a similar prohibition under Section 13375, which reads as follows: "The discharge of any radiological, chemical, or biological warfare agent into the waters of the state is hereby prohibited." However, rather than give a hard and fast absolute prohibition on radioactive substances, Regional Water Board staff have set the following effluent limit for radioactivity: "Radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Section 64443, of the California Code of Regulations, or subsequent revisions." The limit is based on the Basin Plan incorporation of Title 22, *Drinking Water Standards*, by reference, to protect beneficial uses. Therefore, the accompanying Order will retain the limit for radioactivity.

xvi. Iron

The effluent limitation of 300 mg/l for iron was developed based on the USEPA document, *Quality Criteria for Water 1986* [EPA 440/5-86-001, May 1, 1986], also referred to as the *Gold Book*, for the protection of GWR beneficial use. 300 µg/L is the secondary MCL for iron, however iron is not a priority pollutant. Some POTWs have a final effluent limitation for iron. Using the receiving water sample results and the TSD methodology, the discharge currently has reasonable potential to contribute to an exceedance of the Gold Book criteria; the secondary Federal MCL; and, the secondary California MCL for iron. The limit was expressed as a monthly average rather than a daily maximum, because it was assumed that the groundwater basins have assimilative capacity for iron. A WQBEL is now proposed which has to be met at the end of pipe, for protection of the GWR beneficial use in the surface water, since the discharge has reasonable potential to cause or contribute to an exceedance.

The California Toxic Rule (CTR) and State Implementation Policy (SIP) specify numeric objectives for toxic substances and the procedures whereby these objectives are to be implemented. The procedures include those used to conduct reasonable potential analysis to determine the need for effluent limitations for priority and non-priority pollutants.

3. Determining the Need for WQBELs

The Regional Water Board developed WQBELs for ammonia-nitrogen, nitrite-nitrogen, nitrite plus nitrite as nitrogen, and chloride based upon Total Maximum Daily Loads (TMDLs). The effluent limitations for these pollutants were established regardless of whether or not there is reasonable potential for the pollutants to be

present in the discharge at levels that would cause or contribute to a violation of water quality standards. The Regional Water Board developed water quality-based effluent limitations for these pollutants pursuant to section 122.44(d)(1)(vii), which does not require or contemplate a reasonable potential analysis. The Regional Water Board has determined that the WQBEL is consistent with the assumptions of the TMDL. Similarly, compliance with the effluent limitation will satisfy the requirements of the TMDL. Similarly, the SIP at Section 1.3 recognizes that reasonable potential analysis is not appropriate if a TMDL has been developed.

In accordance with Section 1.3 of the SIP, the Regional Water Board conducted a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Water Board analyzed effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that demonstrate reasonable potential, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Regional Water Board staff would normally identified the maximum effluent concentration (MEC) and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limitation is needed.

Trigger 2 – If background water quality (B) > C and the pollutant is detected in the effluent, a limitation is needed.

Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, then best professional judgment is used to determine that a limit is needed.

Sufficient effluent and ambient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

However, since the Newhall Ranch WRP has yet to be constructed, there is no effluent data available from which to select the MEC. Although, there is ample receiving water data available. This receiving water data provides information to be able to determine that the discharge could contribute to an exceedance. In the

absence of final effluent data, Reasonable potential analysis was also conducted using the procedure in section 3.2 of the Technical Support Document, where other information and best professional judgement was used to prescribe effluent limits based on similar facilities with similar processes.

The RPA was performed for the priority pollutants regulated in the CTR for which data are available. Based on the RPA, there was reasonable potential for the Discharge to contribute to an exceedance of the following pollutants: antimony, arsenic, copper, lead, mercury, nickel, selenium, zinc, cyanide, acrylonitrile, iron, tetrachloroethylene, bis(2-ethylhexyl)phthalate, 1,4-dichlorobenzene, lindane, and 4,4-DDE.

4. WQBEL Calculations

- a. **Calculation Options.** Once RPA has been conducted using either the TSD or the SIP methodologies, WQBELs are calculated. Alternative procedures for calculating WQBELs include:
 1. Use WLA from applicable TMDL
 2. Use a steady-state model to derive Maximum Daily Effluent Limits and Average Monthly Effluent Limits.
 3. Where sufficient data exist, use a dynamic model which has been approved by the State Water Board.
- b. **SIP Calculation Procedure.** Section 1.4 of the SIP requires the step-by-step procedure to "adjust" or convert CTR numeric criteria into Average Monthly Effluent Limitations (AMELs) and Maximum Daily Effluent Limitations (MDELs), for toxics.

Step 3 of Section 1.4 of the SIP (page 8) lists the statistical equations that adjust CTR criteria for effluent variability.

Step 5 of Section 1.4 of the SIP (page 10) lists the statistical equations that adjust CTR criteria for averaging periods and exceedance frequencies of the criteria/objectives. This section also reads, "For this method only, maximum daily effluent limitations shall be used for publicly-owned treatment works (POTWs) in place of average weekly limitations.

Sample calculation for 4,4'-DDE:

Step 1: Identify applicable water quality criteria.

From California Toxics Rule (CTR), we can obtain the Criterion Maximum Concentration (CMC) and the Criterion Continuous Concentration (CCC).

Freshwater Aquatic Life Criteria:

CMC = NA $\mu\text{g/L}$ (CTR page 31715, column B1) and

CCC = NA $\mu\text{g/L}$ (CTR page 31715, column B1); and

Human Health Criteria for Organisms only = 0.00059 $\mu\text{g/L}$ (CTR page 31715, column D2).

Step 2: Calculate effluent concentration allowance (ECA)

ECA = Criteria in CTR, since no dilution is allowed.

Step 3: Determine long-term average (LTA) discharge condition

i. Calculate CV:

CV = Standard Deviation/Mean

= 0.6 (By default because data was > 80% nondetect, SIP page 6)

ii. Find the ECA Multipliers from SIP Table 1 (page 7), or by calculating them using equations on SIP page 6. When CV = 0.6, then:

ECA Multiplier acute = 0.321 and

ECA Multiplier chronic = 0.527

iii. LTA acute = ECA acute x ECA Multiplier acute
= NA $\mu\text{g/L}$ x 0.321 = NA $\mu\text{g/L}$

iv. LTA chronic = ECA chronic x ECA Multiplier chronic
= NA $\mu\text{g/L}$ x 0.527 = NA $\mu\text{g/L}$

Step 4: Select the lowest LTA

In this case, the lowest LTA is not applicable.

Step 5: Calculate the Average Monthly Effluent Limitation (AMEL) & Maximum Daily Effluent Limitation (MDEL) for AQUATIC LIFE

i. Find the multipliers. You need to know CV and n (frequency of sample collection per month). If effluent samples are collected 4 times a month or less, then n = 4. CV was determined to be 0.6 in a previous step.

AMEL Multiplier = 1.552

MDEL Multiplier = 3.114

- ii. AMEL aquatic life = lowest LTA (from Step4) x AMEL Multiplier
= NA $\mu\text{g/L}$ x 1.552 = NA $\mu\text{g/L}$
- iii. MDEL aquatic life = lowest LTA (from Step4) x AMEL Multiplier
= NA $\mu\text{g/L}$ x 3.114 = NA $\mu\text{g/L}$

Step 6: Find the Average Monthly Effluent Limitation (AMEL) & Maximum Daily Effluent Limitation (MDEL) for HUMAN HEALTH

- i. Find factors. Given CV = 0.6 and n = 4.

For AMEL human health limit, there is no factor.
The MDEL/AMEL human health factor = 2.006

- ii. AMEL human health = ECA = 0.00059 $\mu\text{g/L}$
- iii. MDEL human health = ECA x MDEL/AMEL factor
= 0.00059 $\mu\text{g/L}$ x 2.006 = 0.001184 $\mu\text{g/L}$

Step 7: Compare the AMELs for Aquatic life and Human health and select the lowest. Compare the MDELs for Aquatic life and Human health and select the lowest

- i. Lowest AMEL = 0.00059 $\mu\text{g/L}$ (Based on Human Health protection)
- ii. Lowest MDEL = 0.001184 $\mu\text{g/L}$ (Based on Human Health protection)

- c. **Mass based limits.** 40 CFR section 122.45(f)(1) requires that except under certain conditions, all permit limits, standards, or prohibitions be expressed in terms of mass units. 40 CFR section 122.45(f)(2) allows the permit writer, at its discretion, to express limits in additional units (e.g., concentration units). The regulations mandate that, where limits are expressed in more than one unit, the permittee must comply with both.

Generally, mass-based limits ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limits. Concentration-based effluent limits, on the other hand, discourage the reduction in treatment efficiency during low-flow periods and require proper operation of the treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low-flow periods and still meet its mass-based limits. To account for this, this permit includes mass and concentration limits for some constituents

d. Mixing Zones and Dilution Credits - Mixing zones, dilution credits, and attenuation factors are not allowed in the accompanying Order. Allowance of a mixing zone is in the Regional Water Board's discretion under Section 1.4.2 of the SIP and under the Basin Plan (Basin Plan Chapter 4, page 30). If the Discharger subsequently conducts appropriate mixing zone and dilution credit studies, the Regional Water Board can evaluate the propriety of granting a mixing zone or establishing dilution credits. The Regional Water Board has concluded mixing zones and dilution credits would be inappropriate to grant, at this time, in light of the following factors:

1. The Newhall Ranch WRP discharge contributes the largest flow (effluent dominated) into the Santa Clara River watershed in the vicinity of the discharge point where it overwhelms the receiving water providing very limited mixing and dilution;
2. Even in the absence of the Newhall Ranch WRP discharge, the receiving water primarily consists of nuisance flows and other effluents, limiting its assimilative capacity;
3. Several reaches of the Santa Clara River [including those subject to this Order] are 303(d) listed (i.e., impaired) for certain constituents;
4. Impaired waters do not have the capacity to assimilate pollutants of concern at concentrations greater than the applicable objective;
5. For the protection of the beneficial uses is listed in the Order;
6. Consistent with Antidegradation Policies;
7. Because a mixing zone study has not been conducted; and,
8. Because hydrologic models of the discharge and the receiving waters have not been conducted.

On July 16, 2003, the State Water Board adopted Order No. WQO 2003-0009, directing Regional Water Board staff to work with CSDLAC, once data was provided, to determine whether dilution and attenuation are appropriate factors to consider in developing effluent limits to protect the GWR beneficial use, in the Whittier Narrows WRP NPDES permit. However, this does not apply to the Newhall Ranch WRP because Newhall has not provided the necessary site-specific data or studies regarding the ground water basins in the Newhall area.

e. Interim Monitoring Requirements - In accordance with the SIP, the Regional Water Board may impose interim monitoring requirements upon the Discharger, so that the Discharger obtains adequate ambient, background water data for

priority pollutants upstream of the discharge point as well as suitable effluent data. The Executive Officer directed major Dischargers to begin an interim monitoring program for the duration of 18 months, beginning July 2001. Similarly, the Newhall Land WRP, once discharge begins, will be required to collect eighteen monthly samples and report the results on a monthly basis to the Regional Water Board. After additional information is gathered, Regional Water Board staff will conduct RPA once again, to determine if additional numeric limitations are necessary. Section 1.3, Step 8, of the SIP authorizes the Regional Water Board to use the gathered data to conduct RPA, as outlined in Steps 1 through 7, and determine if a water quality-based effluent limitation is required.

A reopener provision is included in this Order that allows the permit to be reopened to allow the inclusion of new numeric limitations for any constituent that exhibits reasonable potential to cause or contribute to exceedance of applicable water quality objectives.

Summary of Water Quality-based Effluent Limitations Discharge Point 001

Table 5. Summary of Water Quality-based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Total ammonia (NH ₃ as N)	mg/L	1.48 ²	--	3.87 ³	--	--
	lbs/day ¹	25	--	65	--	--
Nitrate-N + Nitrite-N	mg/L	5	--	--	--	--
	lbs/day ¹	80	--	--	--	--
Nitrite-N	mg/L	1	--	--	--	--
	lbs/day ¹	17	--	--	--	--
Detergents (as MBAS)	mg/L	0.5	--	--	--	--
	lbs/day ¹	8	--	--	--	--
Total residual chlorine	mg/L	--	--	0.1	--	--
Antimony	µg/L	6	--	--	--	--
	lbs/day ¹	0.1	--	--	--	--
Arsenic	µg/L	50	--	--	--	--
	lbs/day ¹	0.8	--	--	--	--
Copper	µg/L	15	--	31	--	--
	lbs/day ¹	0.25	--	0.52	--	--
Lead	µg/L	7.8	--	16	--	--
	lbs/day ¹	0.13	--	0.27	--	--
Mercury	µg/L	0.051	--	0.10	--	--
	lbs/day ¹	0.00085	--	0.0017	--	--
Nickel	µg/L	100	--	--	--	--
	lbs/day ¹	1.7	--	--	--	--
Selenium	µg/L	4.1	--	8.2	--	--
	lbs/day	0.068	--	0.14	--	--
Zinc	µg/L	5000	--	--	--	--
	lbs/day ¹	83	--	--	--	--
Cyanide	µg/L	4.1	--	8.9	--	--
	lbs/day ¹	0.068	--	0.15	--	--
Acrylonitrile	µg/L	0.66	--	1.3	--	--
	lbs/day ¹	0.011	--	0.022	--	--

² This is the monthly average effluent limit calculated according to the Implementation Plan for ammonia in the Basin Plan, which specifies how to translate the Ammonia WQO into a final effluent limit, consistent with the assumptions of the Santa Clara River Nitrogen Compounds TMDL, Resolution No. 03-011.

³ This is the daily maximum effluent limit calculated according to the Implementation Plan for ammonia in the Basin Plan, which specifies how to translate the Ammonia WQO into a final effluent limit, consistent with the assumptions of the Santa Clara River Nitrogen Compounds TMDL, Resolution No. 03-011.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Tetrachloroethylene	µg/L	5	--	--	--	--
	lbs/day ¹	0.08	--	--	--	--
Bis(2-ethylhexyl)phthalate	µg/L	4	--	--	--	--
	lbs/day ¹	0.07	--	--	--	--
p-Dichlorobenzene (1,4-Dichlorobenzene)	µg/L	5	--	--	--	--
	lbs/day ¹	0.08	--	--	--	--
Lindane	µg/L	0.2	--	--	--	--
	lbs/day	0.003	--	--	--	--
4,4-DDE	µg/L	0.00059	--	0.0012	--	--
	lbs/day	0.0000098	--	0.00002	--	--
Iron	µg/L	300	--	--	--	--
	lbs/day	5	--	--	--	--

5. Whole Effluent Toxicity (WET)

Ambient monitoring data indicates that the background concentration in the lower Santa Clara is toxic to aquatic organisms, and therefore exceeds water quality standards. Final effluent water quality data for the Newhall WRP is not available. However, effluent data contained in monitoring reports for other POTWs in the watershed, shows that chronic toxicity in the effluent has sometimes exceeded 1TUc (monthly median). Therefore, pursuant to the TSD, reasonable potential exists for toxicity. As such, the permit should contain a numeric effluent limitation for toxicity.

The toxicity numeric effluent limitations are based on:

- a. CFR 122.44(d)(v) – limits on whole effluent toxicity are necessary when chemical-specific limits are not sufficient to attain and maintain applicable numeric or narrative water quality standards;
- b. 40 CFR 122.44(d)(vi)(A) – where a State has not developed a water quality criterion for a specific pollutant that is present in the effluent and has reasonable potential, the permitting authority can establish effluent limits using numeric water quality criterion;
- c. Basin Plan objectives and implementation provisions for toxicity;
- d. Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Programs Final May 31, 1996;
- e. Whole Effluent Toxicity (WET) Control Policy July 1994; and,
- f. Technical Support Document (several chapters and Appendix B).

However, the circumstances warranting a numeric chronic toxicity effluent limitation when there is reasonable potential were under review by the State Water Resources Control Board (State Water Board) in SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions]. On September 16, 2003, at a public hearing, the State Water Board adopted Order No. 2003-0012 deferring the issue of numeric chronic toxicity effluent limitations until Phase II of the SIP is adopted. In the mean time, the State Water Board replaced the numeric chronic toxicity limit with a narrative effluent limitation and a 1 TUc trigger, in the Long Beach and Los Coyotes WRP NPDES permits. This permit contains a similar narrative chronic toxicity effluent limitation, with a numeric trigger for accelerated monitoring.

Phase II of the SIP has been adopted, however, the toxicity control provisions were not revised.

On January 17, 2006, the State Water Board Division of Water Quality held a California Environmental Quality Act (CEQA) scoping meeting to seek input on the scope and content of the environmental information that should be considered in the planned revisions of the Toxicity Control Provisions of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). However, the Toxicity Control Provisions of the SIP continue unchanged.

This Order contains a reopener to allow the Regional Water Board to modify the permit, if necessary, consistent with any new policy, law, or regulation. Until such time, this Order will have toxicity limitations that are consistent with the State Water Board's precedential decision.

Acute Toxicity Limitation:

The Dischargers may test for Acute toxicity by using USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, October 2002 (EPA-821-R-02-012). Acute toxicity provisions in the accompanying Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate acute toxicity monitoring and take further actions to identify the source of toxicity and to reduce acute toxicity.

Chronic Toxicity Limitation and Requirements:

Chronic toxicity provisions in the accompanying Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate chronic toxicity monitoring and take further actions to identify the source of toxicity and to reduce chronic toxicity. The monthly median trigger of 1.0 TU_c for chronic toxicity is based on *USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs* Final May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8). In cases where effluent receives no dilution or where mixing zones are not allowed, the 1.0 TU_c chronic criterion should be expressed as a monthly median. The “median” is defined as the middle value in a distribution, above which and below which lie an equal number of values. For example, if the results of the WET testing for a month were 1.5, 1.0, and 1.0 TU_c, the median would be 1.0 TU_c.

The *USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs* Final May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8) recommends two alternatives: using 2.0 TU_c as the maximum daily limit; or using a statistical approach to develop a maximum daily effluent limitation.

D. Final Effluent Limitations

Section 402(o) of the CWA and 40 CFR 122.44 require that effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders based on the submitted sampling data. However, since this is a new discharge, there is no existing Order. The final effluent limitations established in this Order, for the discharge of tertiary-treated effluent through Discharge Serial No.EFF-001, as proposed in the ROWD, are listed below in Table 7:

1. Satisfaction of Anti-Backsliding Requirements

Since this is a new discharge, all proposed effluent limitations and requirements contained in the accompanying Order are new. Therefore, there is no relaxation of effluent limitations. Furthermore, the proposed effluent limitations are at least as stringent as the effluent limitations contained in a similar Order for a nearby facility, the Valencia Water Reclamation Plant. The proposed Order is consistent with the anti-backsliding requirements of the CWA and federal regulations.

2. Satisfaction of Antidegradation Policy

The Discharger proposes to use microfiltration and reverse osmosis in their treatment process. These are state-of-the-art treatment facilities which are expected to produce high quality tertiary-treated effluent. In addition, the discharge has hired consultants to conduct modeling to project downstream conditions. Modeling suggests that the discharge from Newhall may dilute some of the poor quality water with respect to chloride and nutrients. The proposed discharge is consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16.

3. Stringency of Requirements for Individual Pollutants

This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (BOD), total suspended solids (TSS), and hydrogen ion concentration (pH). Restrictions on BOD, TSS, and pH are specified in federal regulations as discussed in Finding F, and the permit's technology-based pollutant restrictions are no more stringent than required by the CWA. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on

May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

The Discharger has not submitted any economic information to indicate what the cost of complying with this Order would be. As discussed in the Fact Sheet, the individual pollutant restrictions are reasonably necessary to protect beneficial uses identified in the Basin Plan, and the economic information related to costs of compliance are not sufficient, in the Regional Water Board's determination, to justify failing to protect beneficial uses. Since this is a new discharge, it is not appropriate to issue a Time Schedule Order.

Summary of Final Effluent Limitations Discharge Point 001

Table 6. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
BOD ₅ 20°C	mg/L	20	30	45	--	--	Technology
	lbs/day	330	500	750	--	--	Calculated
Total Suspended solids (TSS)	mg/L	15	40	45	--	--	Technology
	lbs/day	250	670	750	--	--	Calculated
pH	standard units	--	--	--	6.5	8.5	Basin Plan
Total ammonia (NH ₃ as N)	mg/L	1.48 ⁴	--	3.87 ⁵	--	--	TMDL/Basin Plan WQO
	lbs/day ¹	25	--	65	--	--	Calculated
Nitrate-N + Nitrite-N	mg/L	5	--	--	--	--	TMDL/Basin Plan WQO
	lbs/day ¹	80	--	--	--	--	Calculated
Nitrite-N	mg/L	1	--	--	--	--	Basin Plan WQO
	lbs/day ¹	17	--	--	--	--	Calculated
Detergents (as MBAS)	mg/L	0.5	--	--	--	--	Basin Plan WQO
	lbs/day ¹	8	--	--	--	--	Calculated
Total residual chlorine	mg/L	--	--	0.1	--	--	Basin Plan WQO
Antimony	µg/L	6	--	--	--	--	TSD Chap.3.2
	lbs/day ¹	0.1	--	--	--	--	Calculated
Arsenic	µg/L	50	--	--	--	--	TSD Chap.3.2
	lbs/day ¹	0.8	--	--	--	--	Calculated
Copper	µg/L	15	--	31	--	--	CTR Aquatic Life
	lbs/day ¹	0.25	--	0.52	--	--	Calculated

⁴ This is the thirty-day Ammonia-N (NH₃-N) numeric target for Reach 7 of the Santa Clara River at the County Line, according to the Santa Clara River Nitrogen Compounds TMDL, Resolution No. 03-011, applied as the average monthly effluent limitation.

⁵ This is the one-hour Ammonia-N (NH₃-N) numeric target for Reach 7 of the Santa Clara River at the County Line, according to the Santa Clara River Nitrogen Compounds TMDL, Resolution No. 03-011, applied as the daily maximum effluent limitation.

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Lead	µg/L	7.8	--	16	--	--	CTR Aquatic Life
	lbs/day ¹	0.13	--	0.27	--	--	Calculated
Mercury	µg/L	0.051	--	0.10	--	--	CTR Human health
	lbs/day ¹	0.00085	--	0.0017	--	--	Calculated
Nickel	µg/L	100	--	--	--	--	TSD Chap.3.2
	lbs/day ¹	1.7	--	--	--	--	Calculated
Selenium	µg/L	4.1	--	8.2	--	--	CTR Aquatic Life
	lbs/day	0.068	--	0.14	--	--	Calculated
Zinc	µg/L	5000	--	--	--	--	TSD Chap.3.2
	lbs/day ¹	83	--	--	--	--	Calculated
Cyanide	µg/L	4.1	--	8.9	--	--	TSD Chap.3.2
	lbs/day ¹	0.068	--	0.15	--	--	Calculated
Acrylonitrile	µg/L	0.66	--	1.3	--	--	TSD Chap.3.2
	lbs/day ¹	0.011	--	0.022	--	--	Calculated
Tetrachloroethylene	µg/L	5	--	--	--	--	TSD Chap.3.2
	lbs/day ¹	0.08	--	--	--	--	Calculated
Bis(2-ethylhexyl) phthalate	µg/L	4	--	--	--	--	TSD Chap.3.2
	lbs/day ¹	0.07	--	--	--	--	Calculated
p-Dichlorobenzene (1,4-Dichlorobenzene)	µg/L	5	--	--			TSD Chap.3.2--
	lbs/day ¹	0.08	--	--			Calculated
p-Dichlorobenzene (1,4-Dichlorobenzene)	µg/L	5	--	--			TSD Chap.3.2--
	lbs/day ¹	0.08	--	--			Calculated
Lindane	µg/L	0.2	--	--			TSD Chap.3.2
	lbs/day	0.003	--	--			Calculated
4,4-DDE	µg/L	0.00059	--	0.0012			CTR Human health
	lbs/day	0.0000098	--	0.00002			Calculated
Iron	µg/L	300	--	--			Basin Plan/ MCL
	lbs/day	5	--	--			Calculated

E. Interim Effluent Limitations

Not Applicable. This is a new discharge.

F. Land Discharge Specifications

Not Applicable. Holding ponds at the Newhall Ranch WRP will be concrete-lined and are not designed for purposeful groundwater recharge.

G. Reclamation Specifications

Not Applicable. Water recycling requirements will be regulated under a separate order. Newhall intends on recycling almost 100% of its treated effluent during dry weather.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 CFR § 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in the Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Basin Plan.

B. Groundwater

The Basin Plan contains numeric and narrative water quality objectives applicable to all groundwaters within the Los Angeles Region. Water quality objectives include incorporation by reference to Title 22 drinking water standards, bacteria objectives, and others. Limitations are included in this Order to ensure protection of beneficial uses of the groundwater receiving water.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

Influent monitoring is required:

- To determine compliance with the permit conditions for BOD₅ 20°C and suspended solids removal rates;
- To assess treatment plant performance;
- To assess the effectiveness of the Pretreatment Program (once a pretreatment program is in place); and,
- As a requirement of the Pollution Minimization Program

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed Monitoring and Reporting Program (Attachment E). This provision requires compliance with the Monitoring and Reporting Program, and is based on 40 CFR 122.44(i), 122.62, 122.63, and 124.5. The Monitoring and Reporting Program is a standard requirement in almost all NPDES permits (including the proposed Order) issued by the Regional Water Board. In addition to containing definition of terms, it specifies general sampling/analytical protocols and the requirements of reporting spills, violation, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board policies. The Monitoring and Reporting Program also contains sampling program specific for the Discharger's wastewater treatment plant. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified. Further, in accordance with Section 1.3 of the SIP, a periodic monitoring is required for all priority pollutants defined by the CTR, for which criteria apply and for which no effluent limitations have been established, to evaluate reasonable potential to cause or contribute to an excursion above a water quality standard.

Monitoring for those pollutants expected to be present in the discharge from the facility, will be required as shown on the proposed Monitoring and Reporting Program (Attachment E) and as required in the SIP. Monitoring requirements are similar to those found in the near-by Valencia WRP's Monitoring and Reporting Program. Annual monitoring for priority pollutants in the effluent is required in accordance with the SIP.

Since this is a new discharge, the effluent monitoring requirements are new.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

This requirement establishes conditions and protocol by which compliance with the Basin Plan narrative water quality objective for toxicity will be demonstrated and in accordance with Section 4.0 of the SIP. Conditions include required monitoring and evaluation of the effluent for acute and chronic toxicity and numerical values for chronic toxicity evaluation to be used as 'triggers' for initiating accelerated monitoring and toxicity reduction evaluation(s).

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water.

2. Groundwater

Groundwater monitoring is required to determine compliance with groundwater limitations and to track impacts to the groundwater basins.

E. Other Monitoring Requirements

1. Watershed Monitoring and Bioassessment Monitoring

The goals of the Watershed-wide Monitoring Program including the bioassessment monitoring for the San Gabriel River Watershed are to:

- Determine compliance with receiving water limits;
- Monitor trends in surface water quality;
- Ensure protection of beneficial uses;
- Provide data for modeling contaminants of concern;
- Characterize water quality including seasonal variation of surface waters within the watershed;
- Assess the health of the biological community; and
- Determine mixing dynamics of effluent and receiving waters in the estuary.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

This provision is based on 40 CFR Part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

- a. **Antidegradation Analysis and Engineering Report for Proposed Plant Expansion.** This provision is based on the State Water Resources Control Board Resolution No. 68-16, which requires the Regional Water Board in regulation the discharge of waste to maintain high quality waters of the State, the Discharger must demonstrate that it has implemented adequate controls (e.g., adequate treatment capacity) to ensure that high quality waters will be maintained. This provision requires the Discharger to clarify it has increase plant capacity through the addition of new treatment system(s) to obtain alternative effluent limitations for the discharge from the treatment system(s). This provision requires the Discharger to report specific time schedules for the plants projects. This provision requires the Discharger to submit report to the Regional Water Board for approval.

- b. **Operations Plan for Proposed Expansion.** This provision is based on Section 13385(j)(1)(D) of the CWC and allows a time period not to exceed 90 days in which the Discharger may adjust and test the treatment system(s). This provision requires the Discharger to submit an Operations Plan describing the actions the Discharger will take during the period of adjusting and testing to prevent violations.
- c. **Treatment Plant Capacity.** The treatment plant capacity study required by this Order shall serve as an indicator for the Regional Water Board regarding Facility's increasing hydraulic capacity and growth in the service area.

3. Best Management Practices and Pollution Prevention

- a. **Pollutant Minimization Program.** This provision is based on the requirements of Section 2.4.5 of the SIP.

4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of 40 CFR 122.41(e) and similar requirements for similar facilities.

5. Special Provisions for Municipal Facilities (POTWs Only)

- a. **Biosolids Requirements.** To implement CWA Section 405(d), on February 19, 1993, USEPA promulgated 40 CFR 503 to regulate the use and disposal of municipal sewage sludge. This regulation was amended on September 3, 1999. The regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. It is the responsibility of the Discharger to comply with said regulations that are enforceable by USEPA, because California has not been delegated the authority to implement this program. The Discharger is also responsible for compliance with WDRs and NPDES permits for the generation, transport and application of biosolids issued by the State Water Board, other Regional Water Boards, Arizona Department of Environmental Quality or USEPA, to whose jurisdiction the Facility's biosolids will be transported and applied.
- b. **Pretreatment Requirements.** This Order does not include any requirements for a Pretreatment Program because the discharge is less than 2.0 MGD and because the POTW does not have any significant industrial users (SIUs). In the future, once the design flow approaches 5.0 MGD, the Discharger will be required to develop a Pretreatment Program; and implement and enforce the pretreatment program in its entire service area. At that time, the permit will contain pretreatment requirements consistent with applicable effluent limitations, national standards of performance, and toxic and performance effluent standards established pursuant to Sections 208(b), 301, 302, 303(d), 304, 306, 307, 403,

404, 405, and 501 of the CWA, and amendments thereto. The permit would also contain requirements for the implementation of an effective pretreatment program pursuant to Section 307 of the CWA; 40 CFR 35 and 403; and/or Section 2233, Title 23, California Code of Regulations.

- c. **Spill Reporting Requirements.** This Order established a reporting protocol for how different types of spills, overflow or bypasses of raw or partially treated sewage from its collection system or treatment plant covered by this Order shall be reported to regulatory agencies.

The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General Order) on May 2, 2006. The General Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions.

Furthermore, the General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. The Discharger must comply with both the General Order and this Order.

6. Other Special Provisions

Not applicable.

7. Compliance Schedules

Not applicable because this is a new discharge.

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Newhall Ranch Sanitation District's Newhall Ranch Water Reclamation Plant. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and

has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the following: publication in local newspapers.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on July 6, 2007.

C. Public Hearing Date and Location

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: August 9, 2007

Time: 9:00 AM

Location: Metropolitan Water District of Southern California Board Room
700 North Alameda Street
Los Angeles, California

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is <http://www.waterboards.ca.gov/losangeles/> where you can access the current agenda for changes in dates and locations.

D. Scope of Hearing

The validity of the TMDL for Chloride in the Upper Santa Clara River, the TMDL for Nitrogen Compounds in the Upper Santa Clara River, nor the EIR for the Newhall Land development are at issue before the Regional Water Board in this proceeding. Evidence or argument that challenges the validity of those TMDLs or the EIR, or any aspects of them will not be permitted. The only matter before the Board is the adoption of new Waste Discharge Requirements and permit under the National Pollutant Discharge Elimination System (NPDES) to incorporate applicable water quality objectives associated with discharges to the waters of the United States.

E. Availability of Documents

The Report of Waste Discharge (ROWD), other documents relied upon, tentative effluent limitations and special provisions, comments received, and other information are on file are available for inspection and copying between the hours of 8:00 a.m. and 4:30 p.m. by appointment at the following address:

Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Arrangements for file review and/or obtaining copies of the documents may be made by calling the Los Angeles Regional Water Board at (213) 576-6600. Additionally, the agenda, the fact sheet, the draft order will be available online at:

<http://www.waterboards.ca.gov/losangeles/>

under the "Tentative Permits" heading in the left hand margin.

The entire file will become a part of the administrative record of this proceeding, irrespective of whether individual documents are specifically referenced during the hearing or contained in the agenda packet. The entire file will not be present in the hearing room. In addition to the materials generated for this proceeding, the file includes the administrative records for Resolution 2002-011 (relating to the Ammonia Criteria Implementation Plan) and other applicable Basin Plan amendments. Should any interested persons desire staff to bring to the hearing any particular documents that are not included in the agenda packet, they must submit a written or electronic request to staff during business hours, not later than five business days before the hearing. The request must identify the documents with enough specificity for staff to locate them.

F. Public Comments and Submittal of Evidence

Persons wishing to comment on, or object to, the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them

in writing to Veronica Cuevas at the above address, or send them electronically to vcuevas@waterboards.ca.gov. To be evaluated and responded to by Regional Water Board staff, included in the Board's agenda folder, and fully considered by the Board, written comments or testimony regarding the tentative must be received no later than close of business July 6, 2007. Failure to comply with these requirements is grounds for the Regional Water Board to refuse to admit the proposed written comment or exhibit into evidence pursuant to section 648.4, title 23 of the California Code of Regulations.

G. Nature of Hearing

This proceeding will be a formal adjudicatory proceeding. For such proceedings, the Regional Water Board follows procedures established by the State Water Resources Control Board. These procedures are set forth in regulations commencing with section 647 of title 23 of the California Code of Regulations, in particular, Article 2, commencing with section 648.

H. Parties to the Hearing

The following are the parties to this proceeding:

1. The applicant/permittee (Newhall Ranch Sanitation District)
2. Regional Water Board Staff

Any other persons requesting party status must submit a written or electronic request to staff not later than 20 business days before the hearing. All parties will be notified if other persons are so designated.

I. Hearing Procedure

The board meeting, of which this hearing is a part, will start at 9:00 a.m. Interested persons are invited to attend. When the agenda item is called, staff will present the matter under consideration, after which oral statements from parties or interested persons will be heard. For accuracy of the record, all important testimony should be in writing. The Board will include in the administrative record written transcriptions of oral testimony that is actually presented at the hearing. Oral testimony may be limited to five minutes or less for each interested person, depending on the number of interested persons wishing to be heard.

Parties or interested persons with similar concerns or opinions are encouraged to choose one representative to speak, and are encouraged to coordinate their presentations with each other. Parties will be advised after the receipt of public comments, but prior to the date of the hearing, of the amount of time each is allocated for presentations. That decision will be based upon the complexity and number of issues under consideration, the extent to which the parties have coordinated, the

number of parties and interested persons anticipated, and the time available for the hearing. The parties are invited to contact staff not later than July 26, 2007 (two twwks prior to the hearing) to discuss how much time they believe is necessary for their presentations, and staff will endeavor to accommodate reasonable requests. At the conclusion of testimony, the Board will deliberate in open or close session, and render a decision.

The Board does not generally require the prior identification of witnesses or the cross examination of witnesses, or other procedures not specified in this notice. Parties or persons with special procedural requests or requests for alternative hearing procedures should contact staff, who will endeavor to accommodate reasonable requests. Objections to any procedure to be used during this hearing must be submitted in writing no later than close of business 15 business days prior to the date of the hearing. (Any objections related to the amount of time allocated for parties' presentations much be submitted within two business days of notice thereof, if that date is less than 15 business before the hearing.) Absent such objections, any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of the California Code of Regulations. Procedural objections will not be entertained at the hearing.

If there should not be a quorum on the scheduled date of this meeting, all cases will be automatically continued to the next scheduled meeting on September 6, 2007. A continuance will not extend any time set forth herein.

J. Staff Contacts

If you have any question regarding this proposed action, please contact Veronica Cuevas at (213) 576-6662 or via email at vcuevas@waterboards.ca.gov or her supervisor, Blythe Ponek-Bacharowski at (213) 576-6720 or via email at bponek@waterboards.ca.gov.

K. Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

ATTACHMENT H

SECTION A: STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS¹

1. Implementation Schedule

A storm water pollution prevention plan (SWPPP) shall be developed and implemented for this facility in accordance with the following schedule.

- a. Facility operators beginning industrial activities before October 1, 1992 shall develop and implement the SWPPP no later than October 1, 1992. Facility operators beginning industrial activities after October 1, 1992 shall develop and implement the SWPPP when industrial activities begin.
- b. Existing facility operators that submitted a Notice of Intent (NOI), pursuant to State Water Resources Control Board (State Water Board) Order No. 91-013-DWQ (as amended by Order No. 92-12) or San Francisco Bay Regional Water Quality Control Board (Regional Water Board) Order No. 92-11 (as amended by Order No. 92-116), shall continue to implement their existing SWPPP and shall implement any necessary revisions to their SWPPP in a timely manner, but in no case later than August 1, 1997.

2. Objectives

The SWPPP has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility; and (b) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. BMPs may include a variety of pollution prevention measures or other low-cost and pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, overhead coverage.) To achieve these objectives, facility operators should consider the five phase process for SWPPP development and implementation as shown in Table A.

The SWPPP requirements are designed to be sufficiently flexible to meet the needs of various facilities. SWPPP requirements that are not applicable to a facility should not be included in the SWPPP.

A facility's SWPPP is a written document that shall contain a compliance activity schedule, a description of industrial activities and pollutant sources, descriptions of BMPs, drawings, maps, and relevant copies or references of parts of other plans.

¹ From State Water Board's Water Quality Order No. 97-03-DWQ (NPDES General Permit No. CAS000001), *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*.

The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Water Board inspectors.

3. Planning and Organization

a. Pollution Prevention Team

The SWPPP shall identify a specific individual or individuals and their positions within the facility organization as members of a storm water pollution prevention team responsible for developing the SWPPP, assisting the facility manager in SWPPP implementation and revision, and conducting all monitoring program activities required in Section B of this General Permit. The SWPPP shall clearly identify the General Permit related responsibilities, duties, and activities of each team member. For small facilities, storm water pollution prevention teams may consist of one individual where appropriate.

b. Review Other Requirements and Existing Facility Plans

The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. Facility operators should review all local, State, and Federal requirements that impact, complement, or are consistent with the requirements of this General Permit. Facility operators should identify any existing facility plans that contain storm water pollutant control measures or relate to the requirements of this General Permit. As examples, facility operators whose facilities are subject to Federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials. Similarly, facility operators whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

4. Site Map

The SWPPP shall include a site map. The site map shall be provided on an 8-½ x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, facility operators may provide the required information on multiple site maps.

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TABLE A
FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL
STORM WATER POLLUTION PREVENTION PLANS

<p>PLANNING AND ORGANIZATION</p> <p>Form Pollution Prevention Team Review other plans</p>
<p>ASSESSMENT PHASE</p> <p>Develop a site map Identify potential pollutant sources Inventory of materials and chemicals List significant spills and leaks Identify non-storm water discharges Assess pollutant Risks</p>
<p>BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE</p> <p>Non-structural BMPs Structural BMPs Select activity and site-specific BMPs</p>
<p>IMPLEMENTATION PHASE</p> <p>Train employees Implement BMPs Conduct recordkeeping and reporting</p>
<p>EVALUATION / MONITORING</p> <p>Conduct annual site evaluation Review monitoring information Evaluate BMPs Review and revise SWPPP</p>

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The following information shall be included on the site map:

- a. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, and ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.
- b. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.
- c. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.
- d. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section A.6.a.iv. below have occurred.
- e. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

5. List of Significant Materials

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

6. Description of Potential Pollutant Sources

- a. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section A.4.e above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:

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i. Industrial Processes

Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

ii. Material Handling and Storage Areas

Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

iii. Dust and Particulate Generating Activities

Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.

iv. Significant Spills and Leaks

Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges since April 17, 1994. Include toxic chemicals (listed in 40 CFR, Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (U.S. EPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 Code of Federal Regulations [CFR], Parts 110, 117, and 302).

The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken to ensure spill or leaks do not reoccur. Such list shall be updated as appropriate during the term of this General Permit.

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v. Non-Storm Water Discharges

Facility operators shall investigate the facility to identify all non-storm water discharges and their sources. As part of this investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area.

Non-storm water discharges that contain significant quantities of pollutants or that do not meet the conditions provided in Special Conditions D. are prohibited by this General Permit (Examples of prohibited non-storm water discharges are contact and non-contact cooling water, boiler blowdown, rinse water, wash water, etc.). Non-storm water discharges that meet the conditions provided in Special Condition D. are authorized by this General Permit. The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

vi. Soil Erosion

Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.

- b. The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. This information should be summarized similar to Table B. The last column of Table B, "Control Practices", should be completed in accordance with Section A.8. below.

7. Assessment of Potential Pollutant Sources

- a. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in A.6. above to determine:
- i. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and
 - ii. Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. Facility operators shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.
- b. Facility operators shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be

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present in storm water discharges and authorized non-storm water discharges.

Facility operators are required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in Section 8 below.

8. Storm Water Best Management Practices

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections A.6. and 7. above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

TABLE B
EXAMPLE

ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND
CORRESPONDING BEST MANAGEMENT PRACTICES
SUMMARY

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Vehicle & Equipment Fueling	Fueling	Spills and leaks during delivery. Spills caused by topping off fuel tanks. Hosing or washing down fuel oil fuel area. Leaking storage tanks. Rainfall running off fuel oil, and rainfall running onto and off fueling area.	fuel oil	Use spill and overflow protection. Minimize run-on of storm water into the fueling area. Cover fueling area. Use dry cleanup methods rather than hosing down area. Implement proper spill prevention control program. Implement adequate preventative maintenance program to preventive tank and line leaks. Inspect fueling areas regularly to detect problems before they occur. Train employees on proper fueling, cleanup, and spill response techniques.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness

of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

Facility operators shall consider the following BMPs for implementation at the facility:

a. Non-Structural BMPs

Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. Facility operators should consider all possible non-structural BMPs options before considering additional structural BMPs (see Section A.8.b. below). Below is a list of non-structural BMPs that should be considered:

i. Good Housekeeping

Good housekeeping generally consist of practical procedures to maintain a clean and orderly facility.

ii. Preventive Maintenance

Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.

iii. Spill Response

This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.

iv. Material Handling and Storage

This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.

v. Employee Training

This includes training of personnel who are responsible for (1) implementing activities identified in the SWPPP, (2) conducting inspections, sampling, and visual observations, and (3) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The

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SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.

vi. Waste Handling/Recycling

This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

vii. Recordkeeping and Internal Reporting

This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.

viii. Erosion Control and Site Stabilization

This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.

ix. Inspections

This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPPs are made.

x. Quality Assurance

This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.

b. Structural BMPs

Where non-structural BMPs as identified in Section A.8.a. above are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:

i. Overhead Coverage

This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.

ii. Retention Ponds

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This includes basins, ponds, surface impoundments, bermed areas, etc. that do not allow storm water to discharge from the facility.

iii. Control Devices

This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.

iv. Secondary Containment Structures

This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.

v. Treatment

This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc. that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

9. Annual Comprehensive Site Compliance Evaluation

The facility operator shall conduct one comprehensive site compliance evaluation (evaluation) in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

- a. A review of all visual observation records, inspection records, and sampling and analysis results.
- b. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
- c. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.
- d. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in Section A.10.e, for implementing SWPPP revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that the facility operator is in compliance with this General Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this General Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions 9. and 10. of Section C. of this General Permit.

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10. SWPPP General Requirements

- a. The SWPPP shall be retained on site and made available upon request of a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.
- b. The Regional Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this Section. As requested by the Regional Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.
- c. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.
- d. Other than as provided in Provisions B.11, B.12, and E.2 of the General Permit, the SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a facility operator determines that the SWPPP is in violation of any requirement(s) of this General Permit.
- e. When any part of the SWPPP is infeasible to implement by the deadlines specified in Provision E.2 or Sections A.1, A.9, A.10.c, and A.10.d of this General Permit due to proposed significant structural changes, the facility operator shall submit a report to the Regional Water Board prior to the applicable deadline that (i) describes the portion of the SWPPP that is infeasible to implement by the deadline, (ii) provides justification for a time extension, (iii) provides a schedule for completing and implementing that portion of the SWPPP, and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.
- f. The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

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ATTACHMENT G

GENERIC TOXICITY REDUCTION EVALUATION (TRE) WORKPLAN POTW

1. Information and Data Acquisition

a. Operations and performance review

- i. NPDES permit requirements
 - (1) Effluent limitations
 - (2) Special conditions
 - (3) Monitoring data and compliance history
- ii. POTW design criteria
 - (1) Hydraulic loading capacities
 - (2) Pollutant loading capacities
 - (3) Biodegradation kinetics calculations/assumptions
- iii. Influent and effluent conventional pollutant data
 - (1) Biochemical oxygen demand (BOD₅)
 - (2) Chemical oxygen demand (COD)
 - (3) Suspended solids (SS)
 - (4) Ammonia
 - (5) Residual chlorine
 - (6) pH
- iv. Process control data
 - (1) Primary sedimentation - hydraulic loading capacity and BOD and SS removal
 - (2) Activated sludge - Food-to-microorganism (F/M) ratio, mean cell residence time (MCRT), mixed liquor suspended solids (MLSS), sludge yield, and BOD and COD removal
 - (3) Secondary clarification - hydraulic and solids loading capacity, sludge volume index and sludge blanket depth
- v. Operations information
 - (1) Operating logs
 - (2) Standard operating procedures
 - (3) Operations and maintenance practices
- vi. Process sidestream characterization data
 - (1) Sludge processing sidestreams
 - (2) Tertiary filter backwash
 - (3) Cooling water
- vii. Combined sewer overflow (CSO) bypass data
 - (1) Frequency
 - (2) Volume
- viii. Chemical coagulant usage for wastewater treatment and sludge processing
 - (1) Polymer
 - (2) Ferric chloride
 - (3) Alum

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- b. POTW influent and effluent characterization data**
 - i. Toxicity
 - ii. Priority pollutants
 - iii. Hazardous pollutants
 - iv. SARA 313 pollutants,
 - v. Other chemical-specific monitoring results
- c. Sewage residuals (raw, digested, thickened and dewatered sludge and incinerator ash) characterization data**
 - i. EP toxicity
 - ii. Toxicity Characteristic Leaching Procedure (TCLP)
 - iii. Chemical analysis
- d. Industrial waste survey (IWS)**
 - i. Information on IUs with categorical standards or local limits and other significant non-categorical IUs
 - ii. Number of IUs
 - iii. Discharge flow
 - iv. Standard Industrial Classification (SIC) code
 - v. Wastewater flow
 - (1) Types and concentrations of pollutants in the discharge
 - (2) Products manufactured
 - vi. Description of pretreatment facilities and operating practices
 - vii. Annual pretreatment report
 - viii. Schematic of sewer collection system
 - ix. POTW monitoring data
 - (1) Discharge characterization data
 - (2) Spill prevention and control procedures
 - (3) Hazardous waste generation
 - x. IU self-monitoring data
 - (1) Description of operations
 - (2) Flow measurements
 - (3) Discharge characterization data
 - (4) Notice of sludge loading
 - (5) Compliance schedule (if out of compliance)
 - xi. Technically based local limits compliance reports
 - xii. Waste hauler monitoring data manifests
 - xiii. Evidence of POTW treatment interferences (i.e., biological process inhibition)

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